

3 BANKNOTES AND COINS

3.1 THE CIRCULATION OF BANKNOTES AND COINS AND THE HANDLING OF CURRENCY

DEMAND FOR EURO BANKNOTES AND COINS

At the end of 2007 the number of euro banknotes in circulation stood at 12.1 billion, with a value of €676.6 billion, which represented an increase of 6.7% in terms of volume and 7.7% in terms of value compared with the levels at the end of 2006 (11.3 billion banknotes with a value of €628.2 billion).

The number of banknotes in circulation has continued to expand since the cash changeover in 2002, although at a declining annual growth rate (see Charts 45 and 46). At the end of 2007 the

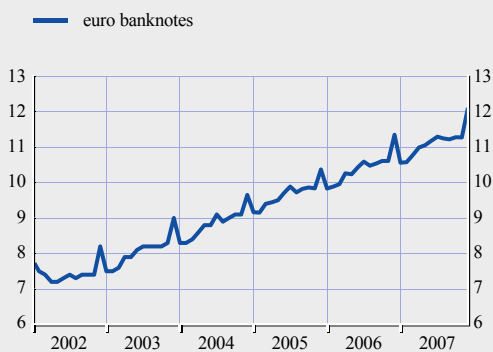
average value of a banknote in circulation was €55.85 (compared with €55.36 one year before).

It is estimated that, in value terms, between 10% and 20% – but potentially a figure closer to the upper end of the range – of the euro banknotes in circulation are held by non-euro area residents, who continue to generate demand for euro banknotes, mainly as a store of value or as a parallel currency.

Looking at a breakdown of the denominations, the €50 and €100 banknotes showed the strongest growth in circulation in numerical terms, rising by 8.9% and 8.3% respectively, followed by the €500 banknote, which rose by

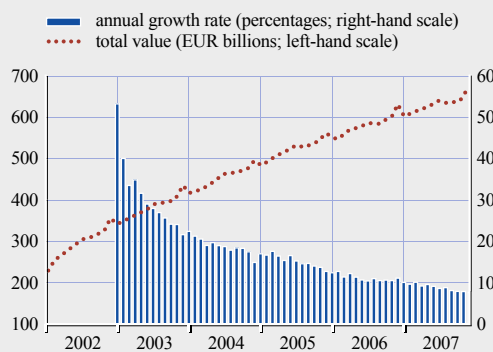
Chart 45 Total number of euro banknotes in circulation between 2002 and 2007

(billions)



Source: ECB.

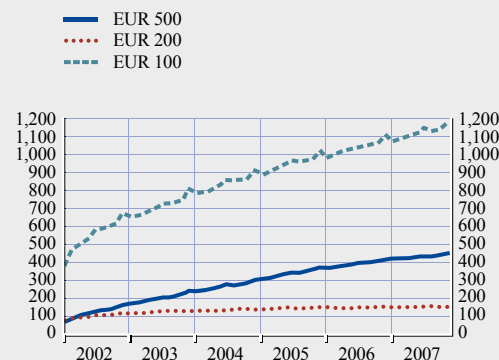
Chart 46 Total value of euro banknotes in circulation between 2002 and 2007



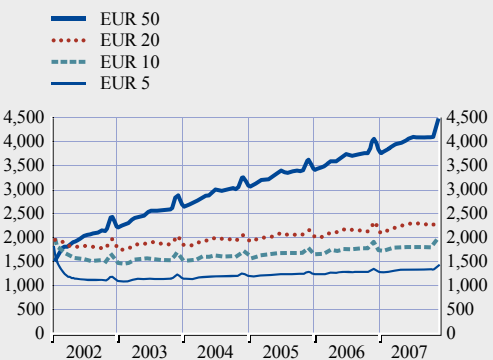
Source: ECB.

Chart 47 Number of euro banknotes in circulation between 2002 and 2007

(millions)



Source: ECB.



7.9%. The number of the other denominations in circulation rose at rates of between 2% and 6% (see Chart 47).

In 2007 the total number of euro coins in circulation (i.e. net circulation excluding stocks held by the NCBs) grew by 9.1% to 75.8 billion, while the value of coins in circulation rose by 7.6% to €19.2 billion. The share of the small denominations, the 1, 2 and 5 cent coins, in the total number of coins in circulation reached 58.0% (compared with 57.3% one year earlier). Anecdotal evidence suggests that this continuing strong demand for low-value coins is explained by relatively high loss rates and hoarding.

BANKNOTE HANDLING BY THE EUROSISTEM

The slight upward trend observed in euro banknote issues and withdrawals in previous years continued. In 2007 the euro area NCBs issued 33.4 billion banknotes, while 32.7 billion banknotes were returned to them. The return frequency¹¹ of banknotes in circulation fell slightly from 3.03 in 2006 to 2.93 in 2007.

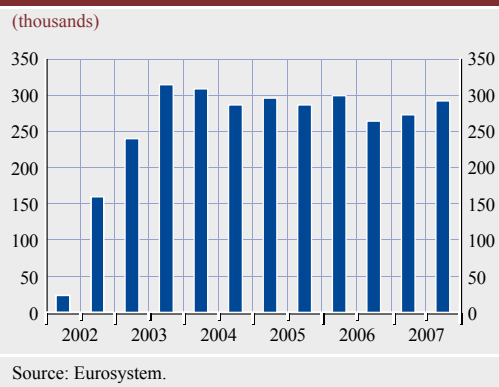
The euro area NCBs check each euro banknote returned to them for authenticity and fitness using fully automated banknote processing machines in order to maintain the quality and integrity of the banknotes in circulation. In 2007 the NCBs identified some 5.5 billion banknotes as being unfit for circulation and replaced them accordingly. This represented an increase of 5.1% compared with the previous year and an unfit rate¹² of 17.0% (16.9% in 2006).

3.2 BANKNOTE COUNTERFEITING AND COUNTERFEIT DETERRENCE

COUNTERFEIT EURO BANKNOTES

The number of counterfeit euro banknotes removed from circulation has remained stable over the last four years, despite the increase in the number of genuine banknotes in circulation over the same period. Chart 48 shows the trend in counterfeits removed from circulation, with figures taken at half-yearly intervals since the euro banknotes were launched. The total number

Chart 48 Number of counterfeit euro banknotes recovered from circulation between 2002 and 2007



of counterfeits received by National Analysis Centres¹³ in 2007 was around 566,000¹⁴. Compared with the number of genuine euro banknotes in circulation, which was on average more than 11 billion in 2007, the quantity of counterfeits is very small indeed. The €50 banknote was the counterfeiters' biggest target, accounting for nearly half of the number of counterfeits. Chart 49 gives a detailed breakdown of the distribution of counterfeits in terms of volume.

The public can remain confident in the security of the euro: it has proven to be a well-protected currency, in terms of both the sophistication of its security features and the effectiveness of European and national law enforcement authorities. However, this confidence should never give rise to complacency, and the ECB's advice to the public is to be alert to the possibility of fraud and to remember the "feel-look-tilt" test.¹⁵

11 Defined as the total number of banknotes returned to NCBs in a given period divided by the average number of banknotes in circulation during that period.

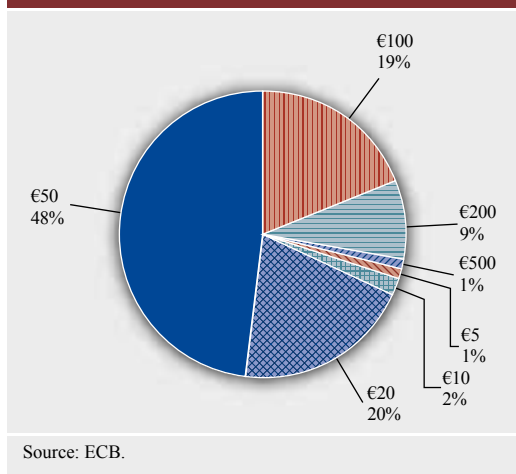
12 Defined as the number of banknotes identified as unfit in a given period divided by the total number of banknotes sorted during that period.

13 Centres established in each EU Member State for the initial analysis of counterfeit euro banknotes at the national level.

14 This figure is subject to very slight correction on account of late reports, particularly from outside the EU.

15 For details, see <http://www.ecb.europa.eu/bc/banknotes/security/html/index.en.html>

Chart 49 Distribution of euro banknote counterfeits by denomination



COUNTERFEIT DETERRENCE

The Eurosystem continued in 2007 to work closely with Europol and the European Commission (in particular the European Anti-Fraud Office, OLAF) in the fight against counterfeiting of the euro. The Eurosystem is active, both in the EU and beyond, in training professional cash handlers in the recognition and handling of counterfeit banknotes.

The Eurosystem participates actively in the work of the Central Bank Counterfeit Deterrence Group (CBCDGD) (a working group of 30 central banks and note-printing authorities cooperating under the auspices of the G10). The ECB hosts the International Counterfeit Deterrence Centre (ICDC), which acts as the technical centre for all CBCDGD members. Its main role is to provide technical support and to operate a centralised communication system serving all parties involved in the field of counterfeit deterrence systems. The ICDC also maintains a public website which provides information and guidance concerning the reproduction of banknote images as well as links to country-specific websites.

3.3 BANKNOTE ISSUANCE AND PRODUCTION

FRAMEWORK FOR RECYCLING BANKNOTES

Following the transposition of the ECB's framework for the detection of counterfeits and the sorting of banknotes for fitness by credit institutions and other professional cash handlers ("Banknote Recycling Framework", or BRF) into national arrangements by all euro area NCBs (with the exception of one, for which the process is pending), credit institutions and other professional cash handlers have been given a transitional period to adjust their cash handling procedures.

In implementing the BRF, the NCBs have followed a variety of approaches that take into account differences in national situations (e.g. as regards the economic and legal environment, the banking structure, and the role of the NCB in the cash cycle). While in a few countries the BRF has been implemented by means of a legal act (complemented by mandatory contracts to be signed with the respective NCB), in other countries, NCBs have issued obligatory instructions (which in some cases bind only credit institutions) or entered into bilateral contractual agreements (whereby credit institutions agree to adhere to the rules of the BRF and to include those rules in contracts with their service providers). In an opinion in December 2007 the Governing Council welcomed the European Commission's proposal to amend Council Regulation (EC) 1338/2001 on the protection of the euro against counterfeiting. In accordance with this proposal, Article 6 of the Regulation would include the express obligation for credit institutions and other professional cash handlers to check euro banknotes and coins which they have received and that they intend to put back into circulation, and would also contain a reference to the procedures to be defined by the ECB as regards the method for checking recycled banknotes.

The ECB continued its efforts, in close cooperation with the euro area NCBs, to ensure the uniform interpretation of the provisions of the BRF throughout the euro area, especially

with regard to the Eurosystem's common test procedure for banknote handling machines.

By adapting their operations in accordance with the BRF, credit institutions and other professional cash handlers will strengthen their ability to detect potential counterfeit euro banknotes. This will contribute effectively to their compliance with the legal obligation to remove potential counterfeits from circulation immediately and to make them available to law enforcement authorities for further investigation. Furthermore, it will ensure that credit institutions supply customers with banknotes that are in good physical condition, thus helping them to distinguish between genuine and counterfeit banknotes.

THE EXTENDED CUSTODIAL INVENTORY PILOT PROGRAMME

The Governing Council decided in 2006 to launch an Extended Custodial Inventory (ECI) pilot programme for euro banknotes in Asia. An ECI is a cash depot maintained by a private bank (ECI bank) that holds currency on a custodial basis. ECIs are expected to facilitate the international distribution of euro banknotes and to provide statistical data on euro banknote circulation outside the euro area, as well as information on counterfeits. In 2007 two large commercial banks active in the wholesale banknote market each began operating, for a one-year period, an ECI for euro banknotes: one in Hong Kong and one in Singapore.

During the pilot programme the ECI banks ensured that only fit banknotes were recirculated and that counterfeits were withdrawn from circulation according to the standards specified by the BRF. Surplus banknotes and banknotes unfit for circulation were shipped to the Deutsche Bundesbank, which acted as the logistical and administrative counterpart for the ECI banks. The ECI operations and statistical reporting of the ECI banks proceeded smoothly.

On the basis of this pilot programme, the Governing Council will decide in 2008 whether

such an ECI programme should be established on a permanent basis.

ROADMAP FOR GREATER CONVERGENCE OF NCB CASH SERVICES

In February 2007 the Governing Council adopted a roadmap with the aim of achieving, in the medium term, greater convergence in the cash services offered by the Eurosystem.

Greater convergence is important because it will allow stakeholders – in particular those with significant cross-border cash activities – to fully reap the benefits of the single currency, and will ensure fair competitive treatment. In view of the different national economic and geographical environments, the Eurosystem does not envisage a “one-size-fits-all” cash supply system. The process of convergence will require some flexibility regarding customer requirements, the cash infrastructure and transitional periods for implementation.

As part of the roadmap, since July 2007 NCBs have provided cash services upon request to euro area credit institutions established outside their jurisdiction (“non-resident banks”) and, since the end of 2007, euro coin lodgements from professional clients have been accepted at all euro area NCBs.

The Eurosystem is still considering a number of further steps, including electronic data exchange with credit institutions for cash lodgements and withdrawals, orientation-independent banknote lodgements and withdrawals as a common free-of-charge NCB service, and common banknote packaging standards for the free-of-charge NCB cash services.

As these issues have a bearing on stakeholders in the cash cycle and could have operational and cost implications, consultations have been conducted at both the national and the European level.

PRODUCTION ARRANGEMENTS

A total of 6.3 billion euro banknotes were produced in 2007, compared with 7.0 billion in 2006. This reduction in the production volume

Table 13 Allocation of euro banknote production in 2007

Denomination	Quantity (millions of banknotes)	NCB commissioning production
€5	980.0	DE, ES, FR
€10	1,280.0	DE, GR, FR, NL, AT
€20	1,890.0	IE, GR, ES, FR, IT, PT, FI
€50	1,730.0	BE, DE, ES, IT
€100	230.0	IT, LU, NL
€200	-	-
€500	190.0	DE
Total	6,300.0	

Source: ECB.

was primarily due to a slightly smaller increase in circulation in 2006 than in the previous year and the production in 2006 of part of the future banknote requirements.

The allocation of euro banknote production continued to be based on the decentralised production scenario with pooling adopted in 2002. Under this arrangement, each euro area NCB is responsible for the procurement of an allocated share of the total requirement for certain denominations (see Table 13).

THE SECOND SERIES OF EURO BANKNOTES

In April 2005 the Governing Council approved a master plan for the development and introduction of the second series of euro banknotes. Since then, the ECB has established the functional and technical requirements for the banknotes by seeking input from various stakeholders, for example through qualitative research activities among members of the public and scientific visual perception and tactility studies. These activities resulted in a shortlist of user-friendly security features which were regarded as potentially suitable for inclusion in the second series of banknotes. During the subsequent industrial validation phase, the shortlist was reduced on the basis of the performance of the security features in a large-scale production environment. Other aspects were also taken into consideration, such as the resilience of the security features to counterfeiting, quality control requirements, cost, intellectual property rights and supply chain situations, as well as health, safety and environmental issues.

In August 2007 the industrial validation phase was largely completed. It resulted in a package of security features which the Governing Council adopted in October 2007. In addition to traditional security features which have proven their effectiveness, several innovative visual and machine-readable security features will be integrated into the second series of banknotes, with a view to effectively thwarting modern counterfeiting techniques. The selected security features have now been embedded in the artistic design, which is based on the “ages and styles” theme of the current series. Keeping this theme, while redesigning the graphical elements, will ensure that the new banknotes are immediately recognisable as euro banknotes, yet allow cash users to distinguish easily between the two series of banknotes. In December 2007 the Governing Council approved the draft design of the new series of banknotes, paving the way for the origination¹⁶ phase. The new series will be launched over a period of several years, and the first denomination is expected to be issued in a few years’ time. The ECB will inform the public well in advance about the modalities of the introduction of the new banknotes.

¹⁶ “Origination” covers the process of high-quality image preparation and the transformation of designs into production tools, such as printing plates.